

## FINANCE AND ADMINISTRATION CABINET COMMONWEALTH OFFICE OF TECHNOLOGY

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JOHN R. FARRIS
Secretary
Finance and Administration Cabinet

MARK A. RUTLEDGE Commissioner

March 30, 2007

## Friends,

All of you are aware that we had another outage at the Commonwealth's Data Center on March 28. This was the second failure within the last six months and the third within a two-year period. I am sure that each of you are as equally frustrated and concerned about this situation as we are, since the Commonwealth's agencies have become increasing dependant on technology to deliver essential government services.

Although each situation has been uniquely different, they have each produced the same result of unplanned service disruptions. We apologize for the stress created by these untimely events and we hope that each of you maintain faith in our services. Please know that we are doing all within our power to address the situation and restore your confidence in the Commonwealth's primary computing facility.

Many of you have asked, "How can a facility advertised with diverse power feeds, Uninterruptible Power Supply (UPS), and a Generator power lose power?" That is a fair question and we will address it. However, I think it is equally important for you to have some background information to understand the entire situation.

The Data Center was built in the late 1970's when computing infrastructure was larger in footprint with different space, power, and cooling requirements. Technology has evolved to smaller platforms that require less space but have greater demands on power and cooling. I felt it was imperative that we hire an Industry leading company to perform a risk management assessment of the facility. We did that, and from the findings prepared a 4.9 million dollar request during the last budget cycle.

We understood that monies and needs were in great demand as we all worked together to be fiscally responsible and invest wisely. We were allocated \$1.2 million for the project. Secretary Farris and Commissioner Abbott recognized the importance of the Data Center and found an additional half million from Facilities operating budget to commit to the project bringing the total to \$1.7 million. Collectively we went thru the assessment and prioritized the identified issues into three categories, High, Medium, and Low. When we



completed this exercise, we had enough funding to address the issues of greatest concern and kicked off the Data Center renovation project.

On to the outages, the first two outages were a result of losing our main power source on both feeds from the utility company. The secondary power systems did not operate as expected due to exposed wires in the UPS logic boards. This was a result of a faulty installation when the UPS was replaced several years back. The wiring for the logic board was placed under the power supply frame and the vibrations generated from the UPS while in service cut thru the protective shielding preventing normal operations. That was found only after the second outage when a specialist from the manufacturer spent a week tearing down the UPS piece by piece because there was no explanation for the failures.

Wednesday's outage was a result of an electrical switch breaking and losing one of the three phases loaded on it. This switch does have redundancy but requires a manual transfer, thus explaining why we had to shutdown the data center to restore service and power to the entire facility. Power was restored around 3:30PM and we then began the restoration process. As with any unplanned outage there were unexpected issues to contend with that caused some extended delays.

The series of outages has placed a new perspective on the Data Center renovation project. Secretary Farris is looking for ways to mediate all of the issues identified in the assessment, as he understands the Data Center's role in delivering essential services to the agencies and the citizens of the Commonwealth. He has charged Commissioner Abbott and me to examine our current plan, identify any new issues, and make a recommendation with a cost proposal to elevate the facility to a Tier II Data Center. In simple terms, we would then have diversity and redundancy at all levels for the Data Center to eliminate any point of failure and allow us to continue operation without the need for any manual switching. We are conducting our work in a quick fashion and plan to make our recommendation to Secretary Farris within the next week.

In closing, I ask for your continued support. We take our responsibilities seriously and are doing everything within our power to remove all potential risks so that we can restore your confidence in the Commonwealth's Data Center. I thank you in advance for your professionalism, understanding, and cooperation as we work through these difficult times.

I will make myself available to answer any questions you may have and update you on our progress until we complete this initiative.

Sincerely,

Mark Rutledge Commissioner

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